



February 2017

DEFENSE CIVIL SUPPORT

DOD, HHS, and DHS
Should Use Existing
Coordination
Mechanisms to
Improve Their
Pandemic
Preparedness

Highlights of GAO-17-150, a report to the Committee on Armed Services, House of Representatives

Why GAO Did This Study

The U.S. Army estimates that if a severe infectious disease pandemic were to occur today, the number of U.S. fatalities could be almost twice the total number of battlefield fatalities in all of America's wars since the American Revolution in 1776. A pandemic occurs when an infectious agent emerges that can be efficiently transmitted between humans and has crossed international borders. DOD's day-to-day functioning and the military's readiness and operations abroad could be impaired if a large percentage of its personnel are sick or absent, and DOD's assistance to civil authorities might be limited.

House Report 114-102 included a provision for GAO to assess DOD's planning and coordination to support civil authorities during a pandemic. This report assesses the extent to which (1) DOD has guidance and plans for supporting civil authorities in the event of a domestic outbreak of a pandemic disease and (2) HHS and DHS have plans to respond to a pandemic if DOD support capabilities are limited, and they have mechanisms to coordinate their pandemic preparedness and response. GAO reviewed agency pandemic guidance and plans, interagency coordination mechanisms, and pandemic-related exercises and after-action reports.

What GAO Recommends

GAO recommends that DOD, HHS, and DHS use existing coordination mechanisms to explore opportunities to improve preparedness and response to a pandemic if DOD's capabilities are limited. DOD, HHS, and DHS concurred with GAO's recommendations.

View GAO-17-150. For more information, contact Joe Kirschbaum, (202) 512-9971 or KirschbaumJ@gao.gov.

February 2017

DEFENSE CIVIL SUPPORT

DOD, HHS, and DHS Should Use Existing Coordination Mechanisms to Improve Their Pandemic Preparedness

What GAO Found

The Department of Defense (DOD) has developed guidance and plans to direct its efforts to provide assistance in support of civil authorities—in particular the Departments of Health and Human Services (HHS) and Homeland Security (DHS)—in the event of a domestic outbreak of a pandemic disease. For example, the *Department of Defense Global Campaign Plan for Pandemic Influenza and Infectious Diseases 3551-13* provides guidance to DOD and the military services on planning and preparing for a pandemic outbreak. DOD's *Strategy for Homeland Defense and Support to Civil Authorities* states that DOD often is expected to play a prominent supporting role to primary federal agencies. DOD also assists those agencies in the preparedness, detection, and response to other non-pandemic viruses, such as the recent outbreak of the Zika virus.

Figure 1: Photograph of the *Aedes aegypti* Mosquito Responsible for Spreading the Zika Virus



Source: Department of Defense | GAO-17-150

HHS and DHS have plans to guide their response to a pandemic, but their plans do not explain how they would respond in a resource-constrained environment in which capabilities like those provided by DOD are limited. DOD coordinates with the agencies, but existing coordination mechanisms among HHS, DHS, and DOD could be used to improve preparedness. HHS's *Pandemic Influenza Plan* is the departmental blueprint for its preparedness and response to an influenza pandemic. DHS's *National Response Framework* is a national guide on how federal, state, and local governments are to respond to such incidents. DOD, HHS, and DHS have mechanisms—such as interagency working groups, liaison officers, and training exercises—to coordinate their response to a pandemic. For example, training exercises are critical in preparing these agencies to respond to an incident by providing opportunities to test plans, improve proficiency, and assess capabilities and readiness. These existing mechanisms provide the agencies opportunities to improve their preparedness and response to a pandemic. HHS and DHS plans do not specifically identify what resources would be needed to support a response to a pandemic in which demands exceeded federal resources. These officials stated that there would be no way of knowing in advance what resources would be required. HHS and DHS are in the process of updating their plans and thus have an opportunity to coordinate with each other and with DOD to determine the appropriate actions to take should DOD's support be limited.

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Abbreviations

AFHSB	Armed Forces Health Surveillance Branch
CDC	Centers for Disease Control and Prevention
DHS	Department of Homeland Security
DOD	Department of Defense
DSCA	Defense Support of Civil Authorities
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
HHS	Department of Health and Human Services
NDMS	National Disaster Medical System
NDMS (FCC)	National Disaster Medical System Federal Coordinating Centers
RFA	Request for Assistance
Stafford Act	Robert T. Stafford Disaster Relief and Emergency Assistance Act

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U.S. GOVERNMENT ACCOUNTABILITY OFFICE

441 G St. N.W.
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February 10, 2017

The Honorable Mac Thornberry
Chairman
The Honorable Adam Smith
Ranking Member
Committee on Armed Services
House of Representatives

The U.S. Army estimates that if a severe infectious disease pandemic were to occur today, the number of U.S. fatalities could be almost twice as great as the total number of battlefield fatalities—over 1 million as of September 2016—from all of America’s wars since the American Revolution in 1776.¹ In comparison, the number of U.S. fatalities (approximately 650,000) from the 1918-1919 “Spanish flu” pandemic is equivalent to about 64 percent of those battlefield fatalities. Extrapolating from data on influenza fatalities from 1918 to 2011—the most recent analysis available—the U.S. Army projects that fatalities in the United States alone from a severe infectious disease pandemic would be over 2 million.² Moreover, influenza viruses—especially highly pathogenic influenza strains like H5N1—remain an urgent global infectious disease threat.³ As of January 2017, the World Health Organization had confirmed 856 human cases of H5N1 infection worldwide between 2003 and 2017, and almost 53 percent of those infections were fatal.

A severe infectious disease pandemic is a unique type of disaster and differs from other disasters because of the transmissibility of influenza viruses, the universal susceptibility of the world’s population to viruses

¹The U.S. Army Office of the Surgeon General derived this information from multiple sources, including the World Health Organization, the Center for Infectious Disease Research and Policy (part of the Academic Health Center at the University of Minnesota), and the Defense Manpower Data Center.

²According to the Centers for Disease Control and Prevention (CDC), the estimates provided by the U.S. Army Office of the Surgeon General are consistent with CDC’s and the Department of Health and Human Service’s current planning scenarios on the impact of an influenza pandemic occurring in the United States.

³The Department of Health and Human Services stated its influenza pandemic modeling projects 63.7 million to 94 million patients could contract the influenza virus based on assumptions from four historical influenza pandemic outbreaks occurring between 1918 and 2009.

that have not previously circulated, and the mobility of human populations. A pandemic occurs when an infectious agent emerges—such as a novel influenza virus—that can be efficiently transmitted between humans and has spread across international borders. It could be natural, accidental, or deliberate in origin, occurring over a wide geographic area. A pandemic has the potential to affect the Department of Defense's (DOD) ability to accomplish its mission and may result in significant increases in requests for DOD assistance from civil authorities if they become overwhelmed in responding to it. A pandemic could significantly impair the military's readiness, jeopardize ongoing military operations abroad, and threaten the day-to-day functioning of the department if a large percentage of its personnel are sick or absent. A pandemic outbreak would be not only a medical problem, but also a personnel and national security problem. Federal officials anticipate that a pandemic would occur in multiple waves over a period of time, rather than as a discrete event. In 2006, the then Homeland Security Council, which was subsequently merged with the National Security Council, estimated that during the peak weeks of a severe influenza pandemic, 40 percent of the U.S. workforce might not be at work because of illness, the need to care for family members who are ill, or fear of becoming infected.⁴ DOD personnel would not be immune, and if the department were to face a similar absentee rate, then DOD's ability to support requests for assistance from civil authorities responding to a pandemic might be limited. In fact, DOD itself might require support from another federal agency, such as the Department of Health and Human Services (HHS), for vaccine procurement and distribution and delivery of antiviral drugs.

The federal government's response to major domestic disasters and emergencies is guided by the *National Response Framework*, a national-level guide on how local, state, and federal governments are to respond to such incidents.⁵ The framework describes specific authorities, key roles

⁴According to the *National Strategy for Pandemic Influenza Implementation Plan*, issued in May 2006, in a severe pandemic, absenteeism could reach 40 percent during the peak weeks of a community outbreak and would have the potential to cause extensive fatalities and severe economic effects.

⁵Department of Homeland Security, *National Response Framework* (3d Ed., June 2016). The framework is a component of the National Preparedness System mandated in Presidential Policy Directive 8, *National Preparedness*. It sets the doctrine for how the United States builds, sustains, and delivers the core capabilities for response that are identified in the National Preparedness Goal, which establishes the capabilities and outcomes the United States must accomplish in order to be secure and resilient. The framework also identifies support functions that serve as the federal government's primary coordinating structure for building, sustaining, and delivering response capabilities.

and responsibilities, and best practices for managing incidents that range from the serious but purely local to large-scale terrorist attacks or natural disasters. According to the *National Response Framework*, HHS serves as the federal government's primary agency responsible for public health and medical preparation and planning for and response to a biological terrorism attack or a naturally occurring outbreak that results from either a known or a novel pathogen, including an emerging infectious disease. The Department of Homeland Security (DHS) is the federal agency responsible for domestic incident management. DOD may be asked to serve in a supporting role to HHS and provide support functions to supplement civil authorities' resources in response to public health and medical disasters. According to Joint Publication 3-28, *Defense Support of Civil Authorities*, civil authorities include the government of the United States and the governments of the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, and the U.S. territories.

According to DOD Directive 3025.18, *Defense Support of Civil Authorities (DSCA)*, and officials in the Office of the Deputy Assistant Secretary of Defense for Homeland Defense Integration and Defense Support of Civil Authorities, the department must evaluate requests for assistance from civil authorities according to their legality, lethality, risk, cost, appropriateness, and effect on readiness.⁶

In 2006 and 2007, we issued several reports that identified management challenges in DOD's influenza pandemic planning and preparedness efforts, such as defining roles, responsibilities, and authorities, among other challenges, and made recommendations to address these challenges. DOD agreed with and took actions on the recommendations we made in these reports. For example, DOD clarified roles and responsibilities and provided guidance on how DOD combatant commands were to plan for pandemics.⁷ In June 2015, we testified on DOD's efforts from March 2010 through December 2014 to address our

⁶Department of Defense Directive 3025.18, *Defense Support of Civil Authorities (DSCA)* (Dec. 29, 2010) (Change 1, Sept. 21, 2012) (Hereinafter cited as DOD Directive 3025.18).

⁷GAO, *Influenza Pandemic: DOD Has Taken Important Actions to Prepare, but Accountability, Funding, and Communications Need to be Clearer and Focused Departmentwide*, GAO-06-1042 (Washington, D.C.: Sept. 21, 2006), and *Influenza Pandemic: DOD Combatant Commands' Preparedness Efforts Could Benefit from More Clearly Defined Roles, Resources, and Risk Mitigation*, GAO-07-696 (Washington, D.C.: June 20, 2007).

recommendations to strengthen its strategy, plans, and guidance for support of civil authorities.⁸

House Report 114-102, accompanying a bill for the National Defense Authorization Act for Fiscal Year 2016, included a provision for us to assess the extent of DOD's planning and coordination to support civil authorities in the event of a domestic outbreak of a pandemic disease.⁹ This report assesses the extent to which (1) DOD has guidance and plans for supporting civil authorities in the event of a domestic outbreak of a pandemic disease and (2) HHS and DHS have plans to respond to a pandemic if DOD's support capabilities are limited, and they have mechanisms to coordinate their pandemic preparedness and response with DOD. While this report focuses on DOD's domestic pandemic response, DOD also is involved in pandemic responses outside of the United States and its territories. We also are including information on DOD's preparedness, detection, and response to the Zika virus in appendix I of this report. While the Zika virus is not a pandemic condition at this time, we are highlighting this issue because of the recent outbreak of the Zika virus and concerns about its effects on military service members, DOD civilians, and their dependents.

To determine the extent to which DOD has guidance and plans for supporting civil authorities in the event of a domestic outbreak of a pandemic, we obtained and analyzed federal guidance primarily from three documents: (1) the *National Strategy for Pandemic Influenza*,¹⁰ which provides an overview of the approach that the federal government will take to prepare for and respond to an influenza pandemic; (2) the

⁸GAO, *Civil Support: DOD Is Taking Action to Strengthen Support of Civil Authorities*, GAO-15-686T (Washington, D.C.: June 10, 2015).

⁹H.R. Rep. No. 114-102 at 217 (2015) accompanying H.R. 1735, a proposed bill for the National Defense Authorization Act for Fiscal Year 2016.

¹⁰Homeland Security Council, *National Strategy for Pandemic Influenza* (Washington, D.C.: November 2005). The strategy provides an overview of the approach that the federal government will take to prepare for and respond to a pandemic, and articulates expectations of non-federal entities to prepare themselves and their communities. It contains three pillars: (1) preparedness and communication, (2) surveillance and detection, and (3) response and containment. The strategy also guides preparedness and response to an influenza pandemic, with the intent of stopping, slowing, or otherwise limiting the spread of a pandemic to the United States; limiting the domestic spread of a pandemic, mitigating disease, suffering, and death; and sustaining infrastructure and mitigating impact to the economy and the functioning of society.

National Strategy for Pandemic Influenza Implementation Plan,¹¹ which lays out implementation requirements, distributes responsibilities among the appropriate federal agencies, lists planning assumptions to facilitate planning efforts, and defines expectations for nonfederal entities;¹² and (3) DOD Directive 3025.18, *Defense Support of Civil Authorities*,¹³ which establishes policies and assigns responsibilities within the department for defense support of civil authorities. We also obtained guidance from the *Department of Defense Global Campaign Plan for Pandemic Influenza and Infectious Diseases*, combatant commands' pandemic plans, and other directives—among other guidance—to determine how DOD plans for and responds to influenza pandemics and infectious diseases. We compared DOD's *Global Campaign Plan* pandemic planning guidance with the *National Response Framework* to determine how DOD provides support to primary federal agencies in their response to incidents such as pandemics.

To determine the extent to which HHS and DHS have plans to respond to a pandemic if DOD's support capabilities are limited, and they have

¹¹ Homeland Security Council, *National Strategy for Pandemic Influenza Implementation Plan* (Washington, D.C.: May 2006). The plan represents a comprehensive effort by the federal government to identify the critical steps that must be taken in the near and long term to address the threat of an influenza epidemic. It includes 324 action items to address the threat of a pandemic, most of which had been reported as completed as of 2008. See GAO, *Influenza Pandemic: Monitoring and Assessing the Status of the National Pandemic Implementation Plan Needs Improvement*, [GAO-10-73](#) (Washington, D.C.: Nov. 24, 2009).

¹² In 2009, we found that the Homeland Security Council (subsequently merged with the National Security Council) and federal agencies needed to improve how they monitored the progress and assessed the completion of the *National Strategy for Pandemic Influenza Implementation Plan*. See GAO, *Influenza Pandemic, Monitoring and Assessing the Status of the National Pandemic Implementation Plan Needs Improvement*, [GAO-10-73](#) (Washington, D.C.: Nov. 24, 2009). The Homeland Security Council did not concur with our three recommendations instructing it to work with responsible federal agencies to (1) develop a monitoring and reporting process for action items that are intended for non-federal entities, such as state and local governments; (2) identify the types of information needed to decide whether to carry out the response-related action items; and (3) develop measures of performance that are more consistent with the descriptions of the action items, and took no action to implement these recommendations.

¹³ DOD Directive 3025.18 provides guidance for the execution and oversight of defense support to civil authorities when such support is requested by civil authorities or by qualifying entities and approved by the appropriate DOD official, or as directed by the President, within the United States, including the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any territory or possession of the United States or any political subdivision thereof.

mechanisms to coordinate their pandemic preparedness and response with DOD, we obtained and analyzed pandemic planning guidance, such as HHS's *Pandemic Influenza Plan*, DHS's *National Response Framework*, and *Federal Interagency Operational Plans*, to identify these primary agencies' roles and responsibilities in the event of a pandemic. We reviewed guidance documents and plans to determine the mechanisms HHS and DHS use to coordinate with DOD; other federal, state, local, tribal, and territorial authorities; and the private sector to prepare for a domestic outbreak of a pandemic disease. We compared HHS's and DHS's pandemic planning guidance with DOD's pandemic planning guidance to determine whether there was unity of effort among DOD and primary federal agencies. We also obtained and analyzed policy and guidance from DOD, HHS, and DHS to identify their roles and responsibilities for coordinating with governmental and private sector entities. To determine how DOD, HHS, and DHS coordinate and participate in training exercises in preparation for a domestic outbreak of a pandemic disease, we obtained and analyzed DOD's and DHS's training exercise guidance to identify joint training exercises, documentation, and sharing requirements in preparation for a pandemic disease response. We conducted interviews with DOD, HHS, and DHS officials to identify the pandemic-related training exercises they conducted from fiscal year 2011 through 2015. We selected this time period because these were the most recent fiscal years for which there is complete information available. From DOD and the Federal Emergency Management Agency (FEMA), we also obtained after-action reports and lessons learned to identify the participants and the type of training exercises conducted. We determined that the interviews, after-action reports, and lessons-learned documentation were sufficiently reliable for the purposes of determining the extent to which DOD and FEMA conducted or participated in pandemic-related training exercises during these fiscal years.

To address each of our objectives, we collected and analyzed documents and interviewed cognizant officials at various DOD offices, including the Offices of the Under Secretary of Defense for Policy, Office of the Assistant Secretary of Defense for Homeland Defense and Global Security, Office of the Assistant Secretary of Defense for Health Affairs, Office of the Deputy Assistant Secretary of Defense for Homeland Defense Integration and Defense Support of Civil Authorities, the Joint Staff, U.S. Northern Command, U.S. Pacific Command, U.S. Southern Command, the National Guard Bureau, the Defense Intelligence Agency, U.S. Army Medical Command, U.S. Army Medical Research and Materiel Command, and the Armed Forces Health Surveillance Branch. We also

collected and analyzed documents and conducted interviews with cognizant officials at HHS (including the Office of the Assistant Secretary for Preparedness and Response, the Centers for Disease Control and Prevention, the Food and Drug Administration, and the National Institutes of Health), and from DHS (including FEMA). More detailed information on our scope and methodology can be found in appendix II of this report.

We conducted this performance audit from September 2015 to February 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Roles and Responsibilities	The <i>National Response Framework</i> consists of a base document and two types of annexes—the Emergency Support Function Annex and the Support Annex. The 2014 <i>Quadrennial Defense Review</i> notes the importance of DOD's role in protecting the homeland and supporting civil authorities in mitigating the effects of natural disasters such as pandemics. ¹⁴ DOD works closely with other federal agencies to coordinate the federal response to address the threat of pandemics and other types of incidents. ¹⁵ Under the <i>National Response Framework</i> , Emergency Support Function (ESF) #8, Public Health and Medical Services Annex, HHS, DHS, and DOD have specific roles and responsibilities to support civil authorities and coordinate response efforts
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¹⁴DOD, *Quadrennial Defense Review 2014* (Washington, D.C.: Mar. 4, 2014).

¹⁵According to the *National Response Framework*, the term “incident” includes actual or potential emergencies and disasters resulting from all types of threats and hazards, ranging from accidents and natural disasters to cyber intrusions and terrorist attacks.

with other federal agencies to address public health and medical disasters.¹⁶

Department of Health and Human Services. HHS, through its Assistant Secretary for Preparedness and Response,¹⁷ leads all federal public health and medical responses to public health emergencies and other incidents covered by the *National Response Framework* and coordinates with other departments and supporting agencies to accomplish this mission. Several of its key functions under ESF #8 include

- activating the National Disaster Medical System¹⁸ as necessary to support operations;
- ensuring the proper disposal of contaminated products and the decontamination of affected food facilities in order to protect the public health;
- coordinating public health and medical support, patient evacuation, and movement requirements with other primary and supporting departments, agencies, and government authorities throughout the incident; and
- coordinating with support agencies—such as DOD—when an incident requires federal assistance above and beyond its interagency mechanisms.¹⁹

¹⁶The *National Response Framework*, ESF #8, Public Health and Medical Services Annex provides the mechanism for coordinated federal assistance to supplement state, tribal, and local resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated federal response, or during a developing potential health and medical emergency.

¹⁷The Office of the Assistant Secretary for Preparedness and Response focuses on preparedness planning and response; building federal emergency medical operational capabilities; countermeasures research, advance development, and procurement; and grants to strengthen the capabilities of hospitals and health care systems in public health emergencies and medical disasters. The office provides federal support, including medical professionals through its National Disaster Medical System, to augment state and local capabilities during an emergency or disaster.

¹⁸DOD Instruction 6010.22, *National Disaster Medical System (NDMS)* (Apr. 14, 2016). The NDMS is a coordinated partnership between DOD, HHS, DHS, and the Department of Veterans Affairs established for the purpose of responding to the needs of casualties, victims, and patients of a public health emergency.

Department of Homeland Security. DHS serves as the lead for interagency coordination and planning for emergency response. Several of its key functions under ESF #8 include

- assisting in providing information and liaison with emergency management officials;
- arranging transportation to evacuate patients who are too seriously ill or otherwise incapable of being evacuated in general evacuation conveyances; and
- arranging for the use of U.S. Coast Guard aircraft and other assets in providing urgent airlift and other transportation support.

Department of Defense. DOD is responsible—subject to the availability of resources and the direction of the President or by approval of the Secretary of Defense—for providing support functions and supplementing civil authorities' resources in response to public health and medical disasters. Several of its key functions under ESF #8 include

- providing military personnel for casualty clearing or staging and other missions;
- providing support for the evacuation of patients to locations where hospital care or outpatient services are available; and
- providing military personnel to assist in the protection of public health by providing, for example, food, water, wastewater removal, solid waste disposal, hygiene, and vector control.²⁰

(See appendix III for a more complete discussion of these federal agencies' roles and responsibilities in support of the *National Response Framework* through ESF #8.)

Process for Requesting DOD Support	DOD typically provides support in response to a formal request for assistance (RFA) from other federal departments or agencies and—in cases where response is needed immediately—from state, local, or tribal
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¹⁹When a federal entity with primary responsibility and authority for handling an incident requires federal assistance above and beyond its interagency mechanisms (e.g., executive orders, memorandums of understanding, and memorandums of agreement, etc.), the department or agency can request additional assistance through DHS using multiagency coordinated structures established in the framework and in accordance with the National Incident Management System.

²⁰Vectors are living organisms—such as mosquitoes, ticks, or fleas—that can transmit infectious diseases between humans or from animals to humans.

and territorial governments. Support provided in response to such RFAs may help these civil authorities to prepare for, prevent, protect against, respond to, and recover from domestic incidents, including terrorist attacks and major disasters. DOD assets are usually requested if other federal, state, local, and tribal assets are not available.²¹ However, DOD resources are not typically required to respond every domestic incident. DOD resources can be made available to support disaster response through a presidential declaration. For example, according to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (commonly referred to as the Stafford Act), when a state's capabilities and resources are overwhelmed and the President declares an emergency or disaster, the state Governor can request assistance from the federal government.²² The Stafford Act gives the President the authority to establish a program of disaster preparedness and response support. *Homeland Security Presidential Directive-5* designates the Secretary of Homeland Security as the principal federal official for domestic incident management.²³ Defense resources are committed only after the primary agency submits a request for assistance, through proper channels,²⁴ and the President or Secretary of Defense authorizes DOD to provide support. Such support may help civil authorities prepare for, prevent, protect against, respond to, or recover from domestic incidents—including pandemics and major disasters. Figure 1 illustrates how DOD's support is obtained through the

²¹According to the *National Response Framework*, issued in June 2016, state, local, tribal, and territorial governments are responsible for coordinating resources and providing guidance for response to all types of incidents, such as pandemics. These governmental entities may negotiate mutual aid and assistance agreements with other local jurisdictions, states, tribes, and territories. If these governmental entities anticipate that their resources may be exceeded, they may request assistance from the federal government.

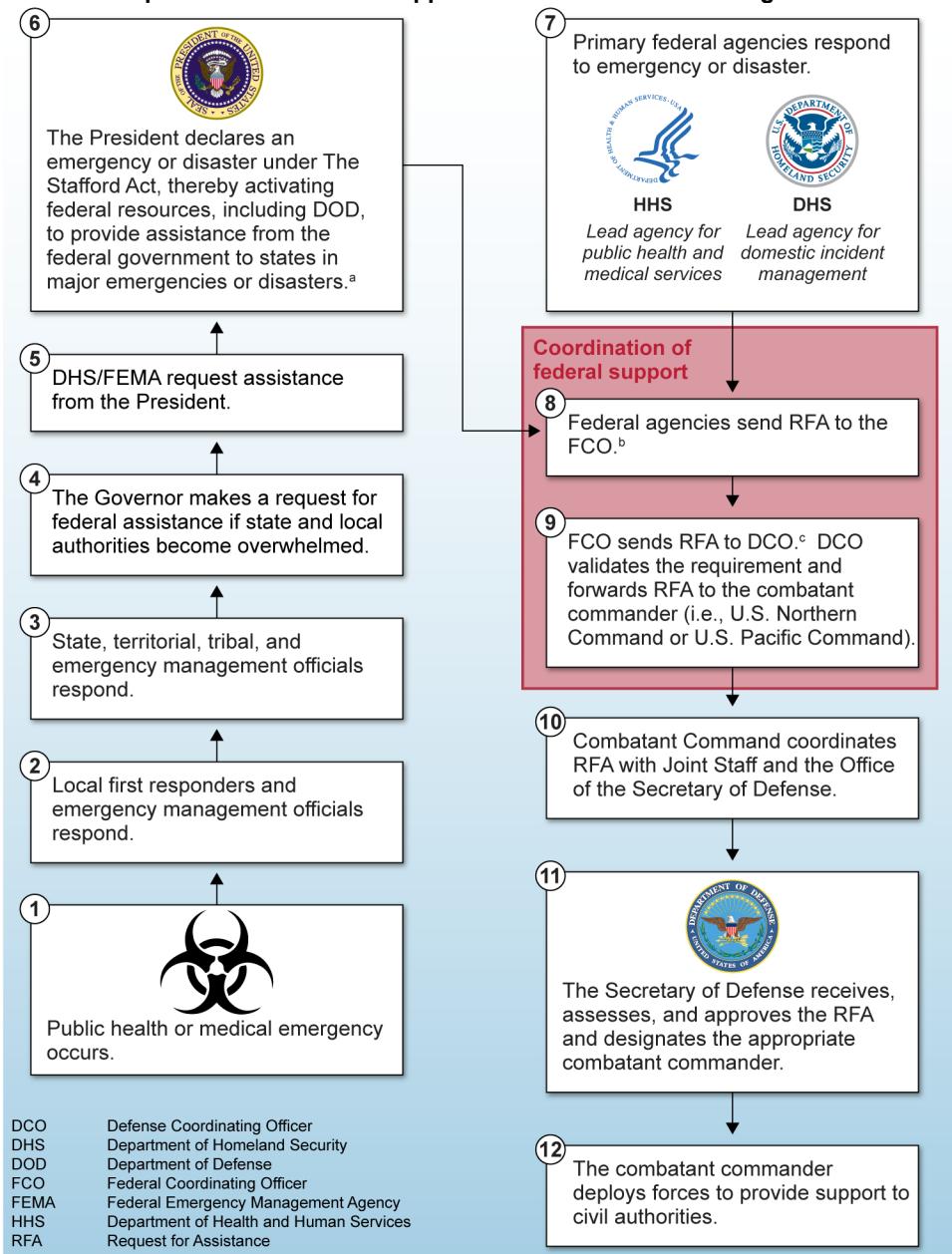
²²See Pub. L. No. 100-707 (1988) (codified as amended at 42 U.S.C. § 5121, et seq.). The Stafford Act provides a means of assistance by the federal government to state and local governments in responding to a presidentially declared major disaster or emergency.

²³See *Homeland Security Presidential Directive-5*, Management of Domestic Incidents, (Feb. 23, 2003).

²⁴According to the *Response Federal Interagency Operational Plan*, issued in July 2014, primary federal agencies have significant authorities, roles, resources, and capabilities for a particular emergency support function. They are responsible for providing direct federal assistance and support for specific incidents and bringing together the capabilities of federal departments and agencies and other national-level assets when federal assistance is needed by state and local governments. DOD refers to primary agencies responsible for leading the federal response to a domestic incident as "lead federal agencies." According to Joint Publication 3-28, *Defense Support of Civil Authorities*, issued on July 31, 2013, these federal agencies have the lead in managing the federal response to a domestic incident. (For purposes of this report, we refer to them as primary federal agencies.)

current RFA process following a presidential declaration of a major disaster or emergency.

Figure 1: Request for Assistance (RFA) Process for Department of Defense Support of Civil Authorities during a Pandemic



Source: GAO analysis of DOD and FEMA information. | GAO-17-150

^aThe President has delegated most of his authority under the Stafford Act to the Secretary of Homeland Security, who has, in turn, delegated those authorities to the FEMA Administrator.

^bThe Federal Coordinating Officer is the lead federal official responsible for coordinating federal resource support for each emergency or major disaster declared under the Stafford Act. The Federal Coordinating Officer makes an initial appraisal of the types of relief most urgently needed, establishes field offices, coordinates the administration of relief through federal agencies, and assists local citizens and public officials in promptly obtaining the assistance to which they are entitled.

^cThe Defense Coordinating Officer serves as DOD's single point of contact to coordinate with federal, state, and local officials.

FEMA currently is developing guidance that will include a standardized mission assignment process, which will replace the current mission assignment process.²⁵ According to FEMA officials, they have not yet determined when a final version of the guidance will be issued.

Providing Immediate Response Authority without a Presidential Declaration

Defense support of civil authorities also can be requested and provided when there has been no presidential declaration. DOD Directive 3025.18, *Defense Support of Civil Authorities*, authorizes immediate response authority for providing support. This can be invoked when DOD is requested to respond to an incident under imminently serious conditions when time does not permit approval from a higher authority. Upon request from a civil authority, DOD officials may employ resources under their control for up to 72 hours, subject to any supplemental direction provided by higher headquarters, to save lives, prevent human suffering, or mitigate great property damage within the United States. Immediate response authority does not permit actions that would subject civilians to the use of military power that is regulatory, prescriptive, proscriptive, or compulsory. In addition, the Economy Act²⁶ permits one federal agency to request the support of another federal agency, provided that the requested services cannot be obtained more cheaply or conveniently by contract. Under this Act, a federal agency with lead (primary) responsibility may request the support of DOD without the presidential declaration of emergency required by the Stafford Act. Finally, DOD may provide health services—as a supporting agency to HHS—in accordance with the National Disaster Medical System, following HHS's declaration of a public health emergency. According to DOD guidance, for the purpose of activating the National Disaster Medical System, a public health emergency may include a public health emergency declaration by the

²⁵FEMA issues mission assignments to obtain resources and services from federal departments and agencies in response to emergency support functions.

²⁶See 31 U.S.C. §1535.

Secretary of Health and Human Services or a declaration of a disaster or emergency pursuant to the Stafford Act.

DOD Has Guidance and Plans to Support Civil Authorities during a Pandemic

DOD has developed guidance and plans at various levels to direct its efforts to provide assistance in support of civil authorities in the event of a domestic outbreak of a pandemic disease. *The Department of Defense Global Campaign Plan for Pandemic Influenza and Infectious Diseases 3551-13*,²⁷ issued in 2013, provides overarching guidance to DOD and the military services on how to plan and prepare for a pandemic outbreak. According to a DOD official, other DOD guidance—such as the *Guidance for the Employment of the Force*—directs U.S. Northern Command and U.S. Pacific Command to be prepared to provide defense support of civil authorities and the *Joint Strategic Capabilities Plan* specifies how this should be accomplished.²⁸

According to the *Global Campaign Plan*, U.S. Northern Command is designated by DOD as the global synchronizer for influenza pandemic and infectious disease plans. In this role, U.S. Northern Command is responsible for providing strategic planning guidance for the department's efforts to prepare for and respond to pandemic diseases. This guidance directs the geographic combatant commands and the military services to develop influenza pandemic and infectious disease plans and to coordinate and synchronize those plans with the *Global Campaign Plan*. As the lead synchronizer, U.S. Northern Command is responsible for ensuring that plans developed by the combatant commands and military services are aligned with the *Global Campaign Plan* in areas such as biosurveillance and disease monitoring and sharing best practices; among other responsibilities. U.S. Northern Command's *CONPLAN 3591-09 Response to Pandemic Influenza*²⁹ provides guidance to U.S. Northern Command decision makers on identifying the capabilities and forces needed to maintain the defense of the homeland while limiting the long-term effect of a pandemic on the security, health, and safety of the nation. This plan explains how U.S. Northern Command would respond to a pandemic outbreak by identifying capabilities—such as personal

²⁷*Department of Defense Global Campaign Plan for Pandemic Influenza and Infectious Disease 3551-13* (Oct. 15, 2013).

²⁸CJCSI 3110.01J, *Joint Strategic Capabilities Plan*, (S//NF), (Sep. 25, 2015).

²⁹United States Northern Command, *USNORTHCOM CONPLAN 3591-09, Response to Pandemic Influenza* (Aug. 13, 2009).

protective equipment and medical countermeasures—to prevent human-to-human transmission. The plan also includes key assumptions about how a pandemic could affect DOD's ability to provide homeland defense. For example, the plan states that an absentee rate of 40 percent among DOD personnel, occurring at the height of a severe pandemic wave, could affect U.S. Northern Command's ability to protect the homeland and result in fewer resources being available to support requests for support from civil authorities. The Homeland Defense mission can be performed only by DOD and thus is its first priority. The pandemic response ultimately is the responsibility of state, local, and tribal and territorial authorities, and with the support of other federal agencies. The plan states that an influenza pandemic would cause unprecedented illness, death, and disruption to normal patterns of life, resulting in emotional, psychological, spiritual, and physical pressures on U.S. Northern Command's forces. The plan states that the combatant command will mitigate the risk of a pandemic by synchronizing planning within the department and with other elements of national power (i.e., diplomatic, informational, military, and economic) to support U.S. government strategies and objectives embodied in the *National Strategy for Pandemic Influenza*. In addition, the plan states that the combatant command will coordinate resources with federal departments and agencies to ensure that preparedness and response efforts are prioritized and resourced to respond to a pandemic.

Other combatant commands also have developed plans for providing support in the event of a pandemic. According to an official from U.S. Northern Command, currently all six of the geographical combatant commands³⁰ have pandemic influenza and infectious disease plans for their assigned areas of responsibility. The remaining three 'functional' combatant commands³¹, which include the U.S. Special Operations Command, have not developed pandemic influenza and infectious disease plans because they operate in support of and within the supported geographical combatant command's area of responsibility.

For example, U.S. Pacific Command's *CONPLAN 5003-13, Commander United States Pacific Command Concept Plan for Pandemic and*

³⁰The six geographical combatant commands are U.S. Africa Command, U.S. Central Command, U.S. European Command, U.S. Northern Command, U.S. Pacific Command, and U.S. Southern Command.

³¹The three functional commands are U.S. Special Operations Command, U.S. Strategic Command, and U.S. Transportation Command.

Emerging Infectious Diseases, fulfills strategic guidance to prepare for and maintain response plans for pandemic and emerging infectious diseases for regional execution in support of U.S. Northern Command's *Global Campaign Plan*. According to U.S. Pacific Command officials, CONPLAN 5003-13 serves as an operational framework for interagency and international collaboration, DOD coordination, and synchronization of a whole-of-government response to pandemics and infectious diseases. Specifically, U.S. Pacific Command's CONPLAN 5003-13 states that the combatant command will adopt an active, layered defense with respect to a disease of operational significance.³² The plan for such a defense consists of the following six phases:

- **Phase 0 (Prepare):** security cooperation and partner activities aimed at building the capacity of partner nations and partner nation militaries in coordination with the host nation, the international health community, and federal agencies.
- **Phase 1 (Protect):** identification and characterization of a disease of operational significance.
- **Phase 2 (Mitigate):** more significant DOD actions to further protect the force and maintain mission assurance.
- **Phase 3 (Respond):** requests for defense support of civil authorities related to pandemics or emerging infectious diseases, or for foreign humanitarian assistance, have been received and authorized through the request for assistance process.
- **Phase 4 (Stabilize):** maintaining appropriate force protection and force health protection measures and finalizing defense support of civil authorities and force health protection requests related to pandemic emerging and infectious diseases.
- **Phase 5 (Transition and Recovery):** redeploying forces while maintaining vigilance for a potential second wave outbreak of a pandemic or emerging infectious disease.

In addition, the plan assumes that certain challenges could affect military personnel's ability to support civil authorities in responding to a pandemic. For example, the plan states that a disease of operational significance

³²A disease of operational significance is an infectious disease (accidental, deliberate, or natural) likely to significantly impact the ability of DOD to maintain mission assurance or likely to result in significantly increased requests for DOD assistance. A disease of operational significance will create an environmental and global disaster (pandemic) with the potential of incapacitating upwards of 40 percent of the overall workforce.

could, among other things, create a global pandemic with the potential of incapacitating upwards of 40 percent of the workforce worldwide. Beyond its primary negative effects, a disease of operational significance could have secondary and tertiary effects, which could significantly threaten the economic, political, and social stability of nations and regions.

The military services have developed plans to contain and mitigate the effects of pandemic influenza and infectious diseases. For example, the *Army's Pandemic Influenza and Infectious Disease Plan* states that the Army will support geographic combatant commands to contain or mitigate the effects of an influenza pandemic or infectious disease of operational significance. The plan also states that the Army will conduct theater and functional planning to protect the personnel and resources necessary to maintain readiness to sustain mission assurance and support, as directed, other U.S. government efforts to protect the nation's welfare, to include assisting partner countries. According to an official in the Office of the Assistant Secretary of Defense for Homeland Defense Integration and Defense Support of Civil Authorities, the Army, the Navy, and the Air Force have provided installations with guidance necessary to develop installation-level disease containment plans to ensure force health protection and continuity of operations in response to pandemics, and direct coordination with state and local authorities.

According to the *Strategy for Homeland Defense and Support to Civil Authorities*, DOD often is expected to play a prominent supporting role to primary federal agencies in their response efforts. According to officials in the Office of the Deputy Assistant Secretary of Defense for Homeland Defense Integration and Defense Support of Civil Authorities, in the event of a pandemic, DOD's support would be most useful in providing unique military capabilities, such as logistics and transportation, to distribute medical supplies and other assets to an affected site. Moreover, in anticipation of requests for this type of assistance, these officials said that because DOD has this role, it is critical that those primary agencies be aware of DOD's capabilities in a given scenario. Furthermore, the strategy states that DOD historically has supported civil authorities in a wide variety of domestic contingencies, often in response to natural disasters. However, the 21st century security environment, the concentration of population in major urban areas, and the interconnected nature of critical infrastructures have all combined to fundamentally alter the scope and scale of "worst case" incidents for which DOD might be called upon to provide support. This environment creates the potential for complex catastrophes, with effects that would qualitatively and

quantitatively exceed those experienced to date. In such events, the demand for defense support of civil authorities would be unprecedented.

Meeting this demand would be especially challenging if, for example, a cyber attack, or other electrical power grid disruption creating cascading failures of critical infrastructure, or DOD's capabilities being limited if a pandemic were to threaten lives and greatly complicate DOD response operations. According to Joint Publication 5-0, *Joint Operation Planning*, an important consideration in effective planning is to anticipate certain events. This publication also states that the body of knowledge and understanding created during DOD's planning allows commanders to monitor, assess, and adapt to uncertain and changing environments and to anticipate and act proactively in crisis situations.³³

According to officials in the Office of the Deputy Assistant Secretary of Defense for Homeland Defense Integration and Defense Support of Civil Authorities, there may be expectation gaps between DOD and primary agencies regarding DOD's capabilities to provide support. Primary agencies coordinate with support agencies—such as DOD—when an incident requires more capabilities than those primary agencies can provide, such as materiel movement during a pandemic. These officials said that while HHS and FEMA can usually rely on DOD during natural disasters, including a pandemic, should support capabilities from primary sources (e.g., other local, regional, state, and federal agencies, non-governmental organizations, and the private sector) become overwhelmed, DOD might not always be in a position to provide requested assistance because its capabilities may be limited.

³³Joint Chiefs of Staff, Joint Publication 5-0, *Joint Operation Planning* (Aug. 11, 2011).

HHS and DHS Have Plans to Respond to a Pandemic, but Their Plans Do Not Explain How They Would Respond If DOD's Capabilities Are Limited, and Coordination Mechanisms Among the Three Agencies Exist That Could Enhance Their Preparedness

HHS and DHS have plans to guide their responses to a pandemic, but their plans do not explain how they would respond in a resource-constrained environment where state and local capabilities are overwhelmed or unavailable, and other federal capabilities, like DOD's, are limited. In addition, DOD, as well as HHS and DHS, through FEMA, use existing mechanisms to coordinate their pandemic preparedness and response. These three departments also have conducted joint training exercises to test plans, improve proficiency, and assess capabilities and readiness to plan, prepare for, and respond to pandemic outbreaks.

HHS and DHS Have Plans for Coordinating Pandemic Preparedness and Response But They Do Not Include Guidance on How They Would Respond If DOD Were Unable to Assist

HHS's *Pandemic Influenza Plan*³⁴ is its blueprint for influenza pandemic preparedness and response. The plan assigns lead roles and responsibilities for response actions to specific HHS agencies and offices. HHS's plan also outlines planning assumptions for its influenza pandemic response, but it is not intended to address what actions other agencies are to take during a pandemic. For example, it outlines assumptions that must be considered in strategic planning, including the ability of an influenza virus to spread rapidly worldwide.³⁵ In addition, the plan assumes that there would be large demands on the health care system and potential national and community disruption as a result of the widespread illness.

The Secretary of Health and Human Services serves as the lead for all federal public health and medical response to public health emergencies, as previously noted, under ESF #8 and incidents covered by the *National Response Plan* or its update.³⁶ In addition, the *National Response Framework*, which is DHS's guidance for coordinating national support to respond to an emergency—such as a pandemic—recognizes HHS as the primary federal agency to respond to public health emergencies and incidents. The *National Response Framework* also designates primary agencies—such as HHS—to oversee preparedness activities through ESF #8, monitor progress in meeting core capabilities, and coordinate with both primary and support agencies through training exercises and other activities.³⁷ Under ESF #8, DOD may be expected to provide

³⁴U.S. Department of Health and Human Services, *Pandemic Influenza Plan* (November 2005).

³⁵HHS officials stated that *The United States Government Framework for Responding to International Requests for Public Health and Medical Assistance during an Influenza Pandemic* outlines the interagency process by which the U.S. government will respond to international requests for public health and medical assistance during influenza pandemics. When this framework is activated and a U.S. government-coordinated approach is in place, HHS serves as a central communication hub to formally receive and record all requests for assistance with public health and medical assets, consistent with its ESF #8 responsibilities under the *National Response Framework* and its role as the National Focal Point for the U.S. International Health Regulations, 2nd Edition, (2005).

³⁶See 42 U.S.C. § 300hh.

³⁷According to the *National Response Framework*, the response mission area includes 15 core capabilities: planning; public information and warning; operational coordination; critical transportation; environmental response/health and safety; fatality management services; fire management and suppression; infrastructure systems; logistics and supply chain management; mass care services; mass search and rescue operations; on-scene security, protection, and law enforcement; operational communications; public health, healthcare, and emergency medical services; and situational assessment.

support capabilities, such as logistical support, to public health and medical response operations, evacuation of patients to locations where hospital care is available, medical supplies for distribution to mass care centers, and assistance in managing human remains—including victim identification and mortuary affairs. (Appendix III lists DOD's roles and responsibilities to support the *National Response Framework*.) ESF #8 serves as a key mechanism to assist HHS in its pandemic preparedness and response because, according to the *National Response Framework*, emergency support functions bring together the capabilities of federal departments and agencies and other national-level assets.

In addition, according to the *National Response Framework*, the Secretary of Homeland Security is responsible for coordinating preparedness activities within the United States to respond to and recover from major disasters and emergencies. The Secretary's responsibilities also include managing FEMA's emergency management and response authorities. According to DHS's *Response Federal Interagency Operational Plan*, primary and support agencies involved in implementing federal emergency support functions conduct contingency and operational planning in conjunction with federal, state, local, tribal, and territorial authorities and the private sector.³⁸

According to officials with HHS's Office of the Assistant Secretary for Preparedness and Response, mechanisms such as interagency dialogue and coordination among federal, state, and local entities are often used to determine what resources would be needed during a pandemic. For example, HHS officials said that surge capabilities, such as capabilities developed through the local Hospital Preparedness Program, could be used to support the local response effort prior to requesting state or federal assistance.³⁹ HHS officials stated that there are other existing mechanisms, such as the Public Health Emergency Medical Countermeasures Enterprise and Enterprise Executive Committee, which

³⁸U.S. Department of Homeland Security, *Response Federal Interagency Operational Plan* (July 2014).

³⁹The Hospital Preparedness Program, managed through the Assistant Secretary for Preparedness and Response, enables health care systems to save lives during emergencies that exceed day-to-day capacity of health and emergency response systems. As the only source of federal funding that supports regional health care system preparedness, the Hospital Preparedness Program promotes a sustained national focus to improve patient outcomes, minimize the need for supplemental state and federal resources during emergencies, and enable rapid recovery.

consists of senior program managers across the partner agencies who address issues such as influenza pandemic preparedness and response capabilities, among other issues.⁴⁰ Influenza Risk Management Meetings are another existing mechanism that provides partner agencies with a venue to discuss their influenza pandemic response.⁴¹

HHS and DHS plans also do not specifically address what resources would be needed to support a response to a pandemic in an environment where federal resources, including DOD, are exceeded by demands. HHS officials stated that there would be no way of knowing in advance what unique facts, circumstances, or conditions might occur to determine what resources would be needed. The *National Response Framework* notes the importance of planning as a core capability to manage the life cycle of a potential crisis, determine capability requirements, and help stakeholders learn their roles. Planning includes the analysis and dissemination of risk assessment data, and the development of plans, procedures, mutual aid and assistance agreements, strategies, and other arrangements to perform specific missions and tasks to improve incident preparedness and response. When planning for an incident, such as a pandemic, governments at all levels have a responsibility to develop continuity plans that identify essential functions, succession and delegation of authority, continuity facilities, communication capabilities, and human resource issues. HHS and DHS are in the process of updating their pandemic plans, which presents an opportunity for them to coordinate with each other and with DOD to determine the appropriate actions to take—training exercises, pre-scripted mission assignments, or

⁴⁰The Enterprise Executive Committee is a part of the Public Health Emergency Medical Countermeasures Enterprise governance structure. The Enterprise Executive Committee is an operational-level decision and coordination body for all policy and product-level issues in the Public Health Emergency Medical Countermeasures Enterprise. The committee is comprised of senior program managers across partner agencies and provides the critical interface and organizing capability between the strategic focus of the Enterprise Senior Council and the tactical-level efforts conducted within the subordinate Integrated Program Teams and Working Groups.

⁴¹Influenza Risk Management Meetings, which include members such as Assistant Secretary for Preparedness and Response/Biomedical Advanced Research and Development Authority, Centers for Disease Control and Prevention, Food and Drug Administration, and National Institutes of Health, cover various subjects for discussion that include, but are not limited to, considerations of vaccine and antiviral stockpiles, and clinical trial response to influenza outbreaks such as H7N9 (Avian Influenza A) and H3N2v (Influenza A Variant Virus). Meetings are conducted about 10 times a year.

other coordination activities—should DOD’s support be limited during a pandemic.⁴²

Finally, according to the *Global Campaign Plan*, large-scale, sustained military conflicts in multiple theaters of operation could severely degrade DOD’s capabilities and capacities to support civil authorities in responding to a pandemic. Although DOD may have personnel and equipment available to some degree to support civil authorities, it may not have the appropriate number or type of personnel, equipment, or training available to provide adequate support. According to an official in the Office of the Deputy Assistant Secretary of Defense for Homeland Defense Integration and Defense Support of Civil Authorities, DOD is not funded for defense support of civil authority missions and must adapt funded military capabilities to conduct such missions.

DOD Coordinates Internally, with HHS, and with DHS through FEMA to Prepare Its Pandemic Response

DOD uses various mechanisms, including planning activities, interagency work groups, liaison officers, and training exercises both to coordinate within the department and its support with HHS and with DHS through FEMA. For example, according to DOD officials, DOD coordinates among its own organizations, such as the combatant commands and military services, to develop pandemic response plans. Specifically, Joint Staff officials stated they collaborate with the Office of the Secretary of Defense, the combatant commands, and the military services to establish guidance for providing support to civil authorities. We previously reported that U.S. Northern Command faced challenges involving coordination with interagency partners and the states in planning, conducting, and assessing exercises.⁴³ We recommended that DOD coordinate with DHS and FEMA to develop guidance and consistently involve state officials in planning, executing, and assessing exercises that incorporate relevant

⁴²Pre-scripted mission assignments are one of several mechanisms departments and agencies use to respond to an incident in a Stafford Act response. FEMA is required to develop pre-scripted mission assignments and the President is required to certify that federal agencies with responsibilities under the *National Response Plan* (now the *National Response Framework*) have operational capabilities to meet the National Preparedness Goal, are compliant with the National Incident Management System, train and exercise their personnel, develop operational plans and related capabilities, and regularly update and verify information to be contained in a capability inventory. See 6. U.S.C. § 753 (c) and (d).

⁴³GAO, *Homeland Defense: U.S. Northern Command Has a Strong Exercise Program, but Involvement of Interagency Partners and States Can Be Improved*, GAO-09-849 (Washington, D.C.: Sept. 9, 2009).

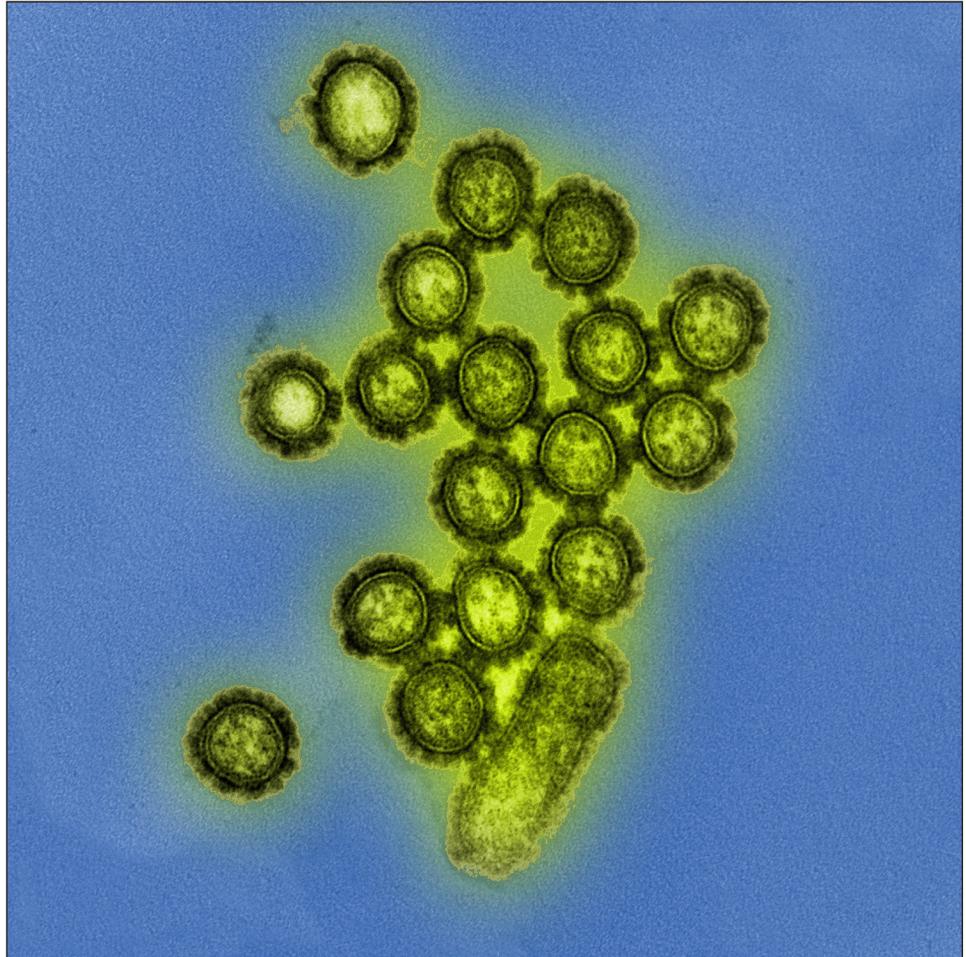
state-specific information. In response, DOD stated that it continues to expand its efforts to ensure that states are able to benefit from participation in DOD-sponsored exercises.

According to officials from the Office of the Assistant Secretary of Defense for Homeland Defense Integration and Defense Support of Civil Authorities, the Joint Staff and the U.S. Pacific Command, DOD coordinates formally and informally with HHS and DHS to identify capability requirements for supporting civil authorities in the event of a pandemic outbreak. For example, officials from the Office of the Assistant Secretary of Defense for Homeland Defense Integration and Defense Support of Civil Authorities and FEMA stated DOD actively is participating in interagency planning efforts to develop FEMA's *Biological Incident Annex*.⁴⁴ FEMA currently is updating the *Biological Incident Annex* that, according to FEMA officials, will include for the first time information on influenza pandemic and infectious disease guidance. As a member of the Public Health Emergency Medical Countermeasures Enterprise,⁴⁵ DOD coordinates with HHS through formal working groups and interagency agreements to develop medical countermeasures for pandemic outbreaks. According to HHS officials, this interagency collaboration helped to develop and distribute diagnostics and vaccines for the 2009 H1N1 influenza pandemic and the antibody therapeutics for the 2014-15 Ebola epidemic (see figure 2). In addition, officials in the Office of the Assistant Secretary of Defense for Health Affairs stated the DOD officials sit on the National Security Council's Sub-Integrated Policy Committee on Pandemic Preparedness, which oversaw interagency implementation of the *National Strategy for Pandemic Influenza*.

⁴⁴The *Biological Incident Annex* is part of the *Response Federal Interagency Operational Plan* and outlines the actions, roles, and responsibilities associated with response to a human disease outbreak of known or unknown origin requiring federal assistance.

⁴⁵The Public Health Emergency Medical Countermeasures Enterprise is a federal interagency body whose partners include certain HHS agencies and offices, DHS, DOD, and other federal agencies. The Enterprise is responsible for coordinating medical countermeasure-related efforts within HHS to advance national preparedness. Established by HHS in July 2006, the Public Health Emergency Medical Countermeasures Enterprise's mission is to advance national preparedness against chemical, biological, radiological, nuclear, and emerging infectious disease threats, including pandemic influenza, by coordinating medical countermeasure-related efforts within HHS and in cooperation with interagency partners.

Figure 2: Electron Micrograph of a Magnified Image of H1N1 Influenza Virus Particles



A colorized transmission of an electron micrograph on H1N1 Influenza virus particles. Surface proteins on the virus particles, which are targeted by flu vaccines, are shown in black.

Source: National Institute of Allergy and Infectious Diseases. | GAO-17-150

According to DOD, HHS, and DHS officials, the three agencies each have liaison officers located in the others to collaborate on federal response plans and facilitate and coordinate requests for DOD assistance. FEMA officials stated that DOD's primary mechanism for coordination with state and local entities is through the Defense Coordinating Officer and FEMA

staff.⁴⁶ According to officials with U.S. Northern Command, Defense Coordinating Officers assist in regional integrated disaster planning and coordination activities and help identify specific capabilities that DOD is likely to be asked to provide in support of specific civil authorities' disaster responses. During an incident response, the Defense Coordinating Officer would integrate with the federal coordinating officer and, upon receiving a request for DOD assistance, would help tailor the request to leverage key DOD capabilities and then submit the request to U.S. Northern Command to begin the Secretary of Defense approval process. FEMA officials stated that Defense Coordinating Officers are integrated with their assigned FEMA regions, and therefore they know what capabilities are being requested and what capabilities DOD has available to respond to these requests. Further, officials from DOD, HHS, and FEMA stated that DOD has conducted or participated in training exercises with HHS and DHS to assess its capabilities for responding to a pandemic outbreak.

DOD, HHS, and FEMA Have Conducted Joint Pandemic-Related Training Exercises and Disseminated After-Action Reports and Lessons Learned

To prepare for a pandemic outbreak, DOD, HHS, and FEMA conducted joint training exercises from 2011 through 2015, the most recent fiscal years for which there is complete information available on training exercises. Exercises play an instrumental role in preparing these agencies to respond to an incident by providing opportunities to test plans, improve proficiency, and assess capabilities and readiness. Short of performance in actual operations, exercises provide the best means to assess the effectiveness of organizations in achieving mission preparedness. Exercises also provide an ideal opportunity to enhance preparedness by collecting, developing, implementing, and disseminating lessons learned and verifying that corrective action has been taken to resolve previously identified issues.

These exercises have included state and local agencies and private sector organizations. For example, according to documentation obtained from U.S. Northern Command, in July 2015, U.S. Northern Command conducted Vista Express, an infectious disease training exercise that

⁴⁶The Defense Coordinating Officer is the single point-of-contact for domestic emergencies and is assigned to a joint field office to process requirements for military support. The Defense Coordinating Officer reports to the field commander and U.S. Northern Command, forwards mission assignments through proper channels to the appropriate military organizations, and assigns military liaisons to activate emergency support functions.

included a weaponized anthrax scenario. Over 80 individuals from 29 organizations participated, including individuals from DHS, FEMA, other federal agencies, and private organizations. According to HHS officials, in 2011 HHS hosted exercises to test public health plans, processes, and procedures to respond to an anthrax outbreak. Participants included representatives from state, local, tribal, territorial and federal agencies. In September 2013, the National Security Staff sponsored an exercise for senior-level federal government executives to discuss interagency plans for response to pandemics, including agency roles and responsibilities. While HHS and DHS have conducted joint training exercises with DOD, they have not exercised a pandemic outbreak scenario in which DOD capabilities are limited. In addition, DOD has not exercised a pandemic outbreak scenario with HHS and DHS. DOD officials believe that an exercise in which DOD participates—but for which it provides limited capabilities or none at all—would be useful in preparing for a pandemic response. However, U.S. Northern Command has not participated in such an exercise.

DOD, HHS, and DHS have issued after-action reports and have documented lessons learned information from the training exercises they have conducted, and they have shared these documents with each other. Specifically, U.S. Northern Command provides external partners with access to its website to provide lessons-learned information. In addition, our analysis of U.S. Northern Command and U.S. Pacific Command after-action reports and other exercise information related to pandemic response for fiscal years 2011 through 2015 indicated that lessons resulting from training exercises, or from a real-world event such as the Ebola outbreak, are summarized in after-action reports or other documentation.⁴⁷ According to U.S. Pacific Command officials, federal, state, and local entities can access DOD's Joint Lessons Learned Information System, through a registered account, to retrieve after-action reports and other information, consistent with DOD's security

⁴⁷This support for our analysis ranges from after-action reports to an executive summary of findings, among other documentation.

requirements.⁴⁸ Otherwise, these entities would need to request after-action reports and other information either from the organization that conducted the training exercise or from the Joint Staff.

According to HHS officials, HHS prepares an after-action report or a summary of conclusions for each pandemic-related training exercise. They stated that after-action reports or other documentation are disseminated through electronic mail to all participants in a training exercise. Agencies that do not participate in the training exercises but are involved in pandemic response efforts also are provided this documentation. While this documentation is not shared with a broad audience, HHS officials said that it is available to DOD stakeholders upon request, and as soon as it is approved for broad release, it is shared with all participants. Further, HHS has access to DOD's Joint Lessons Learned Information System, and thus can access the reports posted on it.

Similarly, our analysis of FEMA documentation from fiscal years 2013 through 2015 indicated that FEMA also documented lessons learned resulting from pandemic-related training exercises. FEMA managed its Lessons Learned Information System as an independent system through 2015; however, FEMA has since consolidated this system with the Naval Postgraduate School's Homeland Security Digital Library.⁴⁹ According to FEMA officials, federal agencies can access FEMA's published lessons-learned information through DOD's Joint Lessons Learned Information System or by requesting such information from FEMA. Federal agencies without access to DOD's Joint Lessons Learned Information System can obtain historical lessons-learned information through the Homeland

⁴⁸According to DOD officials, DOD's Joint Lessons Learned Information System is a knowledge management system and the department's centralized repository for capturing data for development and institutionalization of DOD lessons learned. The system is used to collect observations and best practices identified during training exercises, real-world disasters, as well as daily operations. The system's process entails recording observations, vetting these observations to identify associated issues, then evaluating and verifying resolutions to the identified issues. Upon resolution, these issues are officially designated as DOD lessons learned.

⁴⁹The Naval Postgraduate School Homeland Security Digital Library is a collection of homeland security documents relating to policy, strategy, and organizational management. The mission of the Library is to strengthen national security by supporting federal, state, local, territorial, and tribal analysis, debate, and decision making in homeland defense.

Security Digital Library or directly from FEMA.⁵⁰ According to a FEMA official, FEMA also encourages exercise sponsors to publish their reports on the Homeland Security Information Network.⁵¹ In addition, FEMA, DOD, and several other federal agencies coordinate and share lessons-learned information through monthly interagency planners' teleconferences, exercise planning workshops, and an annual DOD conference.

Conclusions

DOD has developed plans for how it could, if requested, provide support to civil authorities in the event of a pandemic. HHS and FEMA plans contain guidance to respond to a pandemic, but they do not address a scenario in which DOD's capabilities are limited. DOD, HHS, and DHS also have coordination mechanisms to respond to a pandemic, but they may have an expectation gap regarding the capabilities DOD can provide. Unless DOD, HHS, and DHS explore opportunities to enhance their existing coordination mechanisms—such as working groups, Defense Coordinating Officers, and training exercises—to identify approaches for responding to a pandemic in the event that DOD's capabilities are limited, HHS and FEMA risk being unprepared to respond. Given that a severe pandemic is a unique type of disaster and could affect a significant portion of the U.S. population, including both civilian and military personnel, further planning would help HHS and DHS, as well as DOD, to improve their planning and preparation in response to a pandemic. HHS and DHS are in the process of updating their plans, which presents an opportunity for them to coordinate with each other and with DOD to determine the appropriate actions to take should DOD's support be limited during a pandemic. Doing so could further position the federal government to be better prepared to respond to a severe pandemic outbreak should one occur.

⁵⁰According to FEMA officials, state, local, tribal, and territorial authorities cannot access the Joint Lessons Learned Information System's online database, because such access requires a common access card or personal identity verification card.

⁵¹The Homeland Security Information Network enables homeland security professionals to share sensitive but unclassified information. Federal, state, local, territorial, tribal, international and private sector homeland security organizations use the Network to manage operations, analyze data, send alerts and notices, and share information.

Recommendations for Executive Action

We are making three recommendations, one each to DOD, HHS, and FEMA, to use existing coordination mechanisms to improve their preparedness and response to a pandemic if DOD's capabilities are limited.

As DOD plans to respond to a pandemic, we recommend that the Secretary of Defense direct the Under Secretary of Defense for Policy and other DOD officials, as appropriate, to use DOD's existing coordination mechanisms with HHS and FEMA to explore opportunities to improve their preparedness and response to a pandemic if DOD's capabilities are limited.

As HHS plans to respond to a pandemic, we recommend that the Secretary of Health and Human Services direct the Assistant Secretary for Preparedness and Response to use HHS's existing coordination mechanisms with DOD and FEMA to explore opportunities to improve their preparedness and response to a pandemic if DOD's capabilities are limited.

As DHS, through FEMA, plans to respond to a pandemic, we recommend that the Secretary of Homeland Security direct the Administrator of FEMA to use FEMA's existing coordination mechanisms with DOD and HHS to explore opportunities to improve their preparedness and response to a pandemic if DOD's capabilities are limited.

Agency Comments and Our Evaluation

In written comments on a draft of this report, DOD, HHS, and DHS agreed with all three of our recommendations and discussed steps they plan to take to address these recommendations. The full text of DOD's, HHS's, and DHS's written comments are reprinted in their entirety in appendixes IV, V, and VI, respectively. DOD and HHS also provided us with technical comments, which we incorporated in the report as appropriate.

DOD concurred with our recommendation to use its existing coordinating mechanisms with HHS and FEMA to explore opportunities to improve their preparedness and response to a pandemic if DOD's capabilities are limited. DOD stated that it would work with HHS—the primary agency for public health and medical services and the lead for pandemic planning—and DHS to explore opportunities that leverage existing coordination mechanisms in identifying the full spectrum of resources from federal, state, local, and private sector entities for pandemic preparedness and

response. We believe these actions, if fully implemented, will address our recommendation.

HHS concurred with our recommendation with comments explaining how it will use its existing coordination mechanisms with DOD and FEMA to explore opportunities to improve their preparedness and response to a pandemic if DOD's capabilities are limited. HHS stated that it would ensure that the issue of limited support from DOD during a pandemic is included in its analysis and rewrite during its next review of its Pandemic Annex to the All-Hazards plan. We believe these actions, if fully implemented, will address our recommendation.

DHS concurred with our recommendation to use FEMA's existing coordination mechanisms with DOD and HHS to explore opportunities to improve their preparedness and response to a pandemic if DOD's capabilities are limited. In its written response, FEMA agreed that strengthening established relationships with its DOD and HHS partners, including conducting planning events and live exercises, are cornerstones to increased preparedness for all interagency partners tasked with emergency response. FEMA stated that its Office of Response and Recovery planners will continue to explore opportunities to improve and update pandemic preparedness plans by incorporating key planning assumptions, restraints, constraints, post-exercise lessons learned, and other relevant factors related to scenarios in which DOD support is limited. FEMA noted that its planning efforts would be completed by March 13, 2017. We believe these efforts will enhance FEMA's ability to improve its preparedness and response to a pandemic should DOD support be limited and, if fully implemented, will address our recommendation.

We are sending copies of this report to the appropriate congressional committees; Secretaries of Defense, Health and Human Services, and Homeland Security; the Under Secretary of Defense for Policy; the Assistant Secretary of Defense for Homeland Defense and Global Security; the Assistant Secretary of Defense for Health Affairs; the Deputy Assistant Secretary of Defense for Homeland Defense Integration and Defense Support of Civil Authorities; the Chairman of the Joint Chiefs of Staff; the Department of Defense Inspector General, the Commanders, U.S. Northern Command, U.S. Pacific Command, and U.S. Southern Command; the Secretaries of the Army, the Navy, and the Air Force; the Commandant of the Marine Corps; the Chief, National Guard Bureau; the Director of the Defense Intelligence Agency; the Commanders, U.S. Army

Medical Command and U.S. Army Medical Research and Materiel Command; the Chief of the Armed Forces Health Surveillance Branch; and the Directors, Centers for Disease Control and Prevention, Food and Drug Administration, National Institutes of Health, Federal Emergency Management Agency, and Office of Management and Budget.

If you or your staff have any questions concerning this report, please contact Joseph Kirschbaum at (202) 512-9971 or KirschbaumJ@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix VII.

A handwritten signature in black ink, appearing to read "Joseph W. Kirschbaum".

Joseph W. Kirschbaum
Director
Defense Capabilities and Management

Appendix I: DOD's Preparedness, Detection of, and Response to Zika Virus

The Department of Defense (DOD) also assists federal agencies in combating other non-pandemic viruses that have occurred, such as the recent Zika virus. DOD has taken steps to establish preparedness, detection, and response measures to deal with the Zika virus. In February and March 2016, DOD issued guidance on surveillance, control, and testing to DOD medical and force health protection personnel, military services, and installations, and the combatant commands regarding, among other things, prevention, diagnosis, and treatment of the virus. DOD has no dedicated budget for Zika virus preparedness, detection, and response, but it recently provided about \$2 million to military laboratories to expand Zika virus surveillance worldwide and assess the virus's effect on deployed service members' health and readiness. In addition, funds from DOD's Humanitarian Assistance Program have been used to purchase equipment and supplies in support of U.S. Southern Command's Zika prevention projects in several Latin American countries. Further, National Guard units have received funding from the National Guard Bureau's State Partnership Program to provide vector (i.e., mosquito) control and provide personal protective training to partner nations.

The Zika virus is transmitted to humans predominantly through the bite of an infected *Aedes aegypti* or *Aedes albopictus*¹ mosquito. Infected individuals may experience fever, rash, and muscle and joint pain for a short period. Human-to-human transmission is also possible through sexual contact, blood transfusions, and from mother to child. Recently, the Centers for Disease Control and Prevention concluded that Zika virus infection during pregnancy is a cause of microcephaly and other severe fetal brain defects;² thus, pregnant women are at particular risk. In addition, the Zika virus is possibly associated with the Guillain-Barré syndrome, a rare disorder in which the body's immune system attacks part of the nervous system in infected adults; however, this association has not been firmly established.

¹*Aedes aegypti* and *Aedes albopictus* are known to transmit the Zika virus and are well established in the United States, Puerto Rico, the U.S. Virgin Islands, Hawaii, Guam, and American Samoa.

²Microcephaly is a rare neurological condition in which an infant's head is significantly smaller than the heads of other children of the same age and sex. Sometimes detected at birth, microcephaly usually is the result of the brain developing abnormally in the womb or not growing as it should after birth. In addition to a Zika virus infection, other causes of congenital microcephaly may include genetic conditions, such as chromosomal abnormalities, or maternal exposures (e.g., to drugs, alcohol, or other environmental toxins) during pregnancy.

There currently is no vaccine available to prevent infection by the Zika virus. Because of the risk to pregnant women, DOD has issued guidance to the military departments and combatant commands to determine if they should allow relocation and temporary assignment for pregnant service members, DOD employees, and their dependents in areas outside the United States where the Zika virus is being actively transmitted. U.S. Northern Command, U.S. Pacific Command, and U.S. Southern Command each have issued guidance on health protection measures to control the spread of the virus and guidance to pregnant service members, DOD personnel, and dependents to consult their health care providers on the risk of the Zika virus before they travel. The guidance also states service members, DOD personnel, and dependents who suspect they have been infected with the virus should consult their health care provider.

Figure 3 shows a close-up photograph of the *Aedes aegypti* mosquito, the species primarily responsible for the spread of the Zika virus.

Figure 3: Photograph of the *Aedes aegypti* Mosquito



Source: Department of Defense. | GAO-17-150

According to Armed Forces Health Surveillance Branch (AFHSB) officials, the AFHSB tracks the Zika virus among military service members, DOD civilians, and their dependents and provides weekly surveillance reports

to DOD on how the virus is spreading. AFHSB also has issued guidance giving direction to military treatment facilities and laboratories. DOD medical facilities have been notified of the concerns surrounding Zika virus infections and are prepared to test patients who may have been infected. As of August 3, 2016, DOD had reported that 41 active duty, reserve, and National Guard members had been diagnosed with Zika, including one service member who is pregnant. An additional seven family members have been diagnosed with Zika. According to DOD officials, at least 13 DOD laboratories currently are equipped to test human specimen samples for the Zika virus. DOD officials stated that researchers at the Uniformed Services University of the Health Sciences, Walter Reed Army Institute of Research, and Naval Medical Research are developing vaccines, diagnostic tests, and treatments for Zika and related viruses. Recently, DOD researchers indicated that the results of vaccine tests in non-human primates have proven effective and DOD has advanced efforts to proceed with conducting human trials. DOD officials stated that the department also is collaborating with the Department of Health and Human Services, Assistant Secretary for Preparedness and Response/Biomedical Advanced Research and Development Authority, and National Institutes of Health/National Institute of Allergy and Infectious Diseases, and the Centers for Disease Control and Prevention to develop, manufacture, and test a Zika vaccine.

According to U.S. Pacific Command officials, the first documented outbreaks of the Zika virus occurred in 2007 in the South Pacific, on Yap Island, in the Federated States of Micronesia. Between 2013 and 2015, outbreaks occurred on a number of Pacific islands, including French Polynesia and the Cook Islands. U.S. Pacific Command recently issued guidance to service members and DOD civilians to take precautions when traveling to areas affected by the Zika virus.

According to U.S. Southern Command officials, two Army National Guard units were dispatched earlier this year to Guyana and Suriname to provide subject matter expertise in combatting the spread of the Zika virus. In addition, officials said that the command is testing for the Zika virus at the Navy Research Medical Unit in Peru. Further, U.S. Pacific Command officials stated the command is collaborating closely with the Pan American Health Organization and other U.S. federal agencies, such as the U.S. Agency for International Development, to conduct needs assessments for regional ministries to mitigate the effects of the mosquito that carries the Zika virus.

Appendix II: Objectives, Scope, and Methodology

House Report 114-102, accompanying a bill for the National Defense Authorization Act for Fiscal Year 2016, included a provision that we assess the extent of the Department of Defense (DOD) planning to support civil authorities in the event of a domestic outbreak of a pandemic disease.¹ This report assesses the extent to which (1) DOD has guidance and plans for supporting civil authorities in the event of a domestic outbreak of a pandemic disease, and (2) HHS and DHS have plans to respond to a pandemic if DOD's support capabilities are limited, and they have mechanisms to coordinate their pandemic preparedness and response with DOD.

To determine the extent to which DOD has guidance and plans for supporting civil authorities in the event of a domestic outbreak of a pandemic disease, we obtained and analyzed DOD guidance (e.g., DOD Directive 3025.18, *Defense Support of Civil Authorities*), policies (e.g., *Department of Defense Global Campaign Plan for Pandemic Influenza and Infectious Disease*), and directives, among other guidance, to determine DOD's roles and responsibilities. We also obtained federal guidance such as DHS's *National Response Framework*² to determine which primary agencies would rely on DOD's efforts to support civil authorities in the event of a domestic outbreak of a pandemic disease, and DHS's *Response Federal Interagency Operational Plan*, which provides guidance to federal agencies on planning and coordinating federal response efforts. We compared DOD pandemic planning guidance with the *National Response Framework* to identify DOD's role in support of primary federal agencies in their response to incidents such as pandemics. We also reviewed GAO's prior work on influenza pandemic planning within DOD and other federal agencies. A list of related GAO products on influenza pandemics is included at the end of this report.

To determine the extent to which HHS and DHS have plans to respond to a pandemic if DOD's support capabilities are limited, and they have mechanisms to coordinate their pandemic preparedness and response with DOD, we obtained and analyzed pandemic planning guidance, such as HHS's *Pandemic Influenza Plan*, DHS's *National Response Framework*, and *Federal Interagency Operational Plans* to identify these

¹H.R. Rep. No. 114-102 at 217 (2015).

²The *National Response Framework*, issued in May 2013, is the overarching national guidance for how the nation is to respond to all types of disasters and emergencies. The *National Response Framework* was last revised in June 2016.

primary agencies' roles and responsibilities in support of civil authorities and in the event of a severe disease pandemic. We also identified—through interviews with agency officials and a review of guidance documents and plans—the mechanisms HHS and DHS use to coordinate with DOD and other federal, state, local, tribal, and territorial authorities and the private sector to prepare for a domestic outbreak of a pandemic disease and determined how coordination occurs among these entities. We compared HHS and DHS pandemic and response planning guidance with DOD pandemic planning guidance to determine the unity of effort among DOD and primary federal agencies to provide capabilities in support of civil authorities. In addition, we obtained and analyzed policy and guidance from DOD, HHS, and DHS to identify their roles and responsibilities for coordinating with governmental and private sector entities. To determine the extent to which DOD conducts or participates in training exercises with civil authorities in preparation for a domestic outbreak of a pandemic disease, we obtained and analyzed DOD and primary federal agency training exercise guidance to identify joint training exercises, documentation, and sharing requirements in preparation for a pandemic disease response. We conducted interviews with DOD, HHS, DHS, and FEMA to identify the pandemic-related training exercises they conducted during fiscal years 2011 through 2015. From DOD and FEMA, we also obtained after-action reports and lessons learned to identify the training exercise participants and the type of training exercises conducted. We determined that the interviews, after-action reports, and lessons-learned documentation were sufficiently reliable for the purposes of determining the extent to which DOD and FEMA conducted or participated in pandemic-related training exercises from fiscal years 2011 through 2015, the most current, complete fiscal years available.

To address our objectives, we interviewed cognizant officials at various DOD offices, including the Office of the Under Secretary of Defense for Policy, Office of the Assistant Secretary of Defense for Homeland Defense and Global Security, Office of the Assistant Secretary of Defense for Health Affairs, Office of the Deputy Assistant Secretary of Defense for Homeland Defense Integration and Defense Support of Civil Authorities, the Joint Staff, U.S. Northern Command, U.S. Pacific Command, U.S. Southern Command, the National Guard Bureau, the Defense Intelligence Agency, U.S. Army Medical Command, U.S. Army Medical Research and Materiel Command, and the Armed Forces Health Surveillance Branch. We also conducted interviews with cognizant officials at HHS (including the Assistant Secretary for Preparedness and Response, Centers for Disease Control and Prevention, Food and Drug Administration, and National Institutes of Health) and DHS, including the Federal Emergency

Management Agency. We interviewed these officials to determine their agency roles and responsibilities in support of civil authorities during a pandemic response; the mechanisms DOD and primary federal agencies, which have the lead in managing the federal response to a domestic incident,³ use to coordinate planning and response efforts for a pandemic; and the joint training exercises to identify potential capability gaps in their pandemic response plans.

We conducted this performance audit from September 2015 to February 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

³Joint Publication 3-28, *Defense Support of Civil Authorities* (July 31 2013).

Appendix III: Summary of Agencies' Roles and Responsibilities to Support the *National Response Framework*

Under the *National Response Framework*, Emergency Support Function (ESF) #8, Public Health and Medical Services provides the mechanism for coordinated federal government assistance to supplement state, tribal, and local resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated federal response, or during a developing potential health and medical emergency. Table 1 below summarizes the roles and responsibilities of the Department of Health and Human Services, as the primary federal agency, and the Departments of Defense and Homeland Security and Federal Emergency Management Agency, as supporting agencies, in response to the *National Response Framework*.

Table 1: Summary of Primary and Federal Supporting Agencies' Roles and Responsibilities to Support the *National Response Framework*, Emergency Support Function #8, Public Health and Medical Services

Primary Federal Agency	Roles and Responsibilities
Department of Health and Human Services (HHS)	<ul style="list-style-type: none">• Leads the federal effort to provide public health and medical assistance to the affected area.• Coordinates public health and medical support, patient evacuation, and movement requirements with other primary and supporting departments, agencies, and government authorities throughout the incident.• Coordinates staffing of the HHS Emergency Management Group to support the response operation.• Requests appropriate ESF #8 organizations to activate and deploy public health, medical, and veterinary medical personnel, equipment, and supplies in response to requests for federal public health and medical assistance, as appropriate.• Uses HHS personnel (U.S. Public Health Service Commissioned Corps, National Disaster Medical System (NDMS), federal civil service, and civilian volunteers) to address public health, medical, and veterinary medical needs.• Assists and supports state, tribal, and local officials in monitoring for internal patient contamination and administering pharmaceuticals for internal decontamination.• Assists state, tribal, and local officials in establishing a registry of potentially exposed individuals, reconstructing vaccine dosages, and conducting long-term monitoring of this population for potential long-term health effects.• In cooperation with state, tribal, and local officials and the food industry, conducts tracebacks or recalls of adulterated products.• In cooperation with federal, state, tribal, and local officials, ensures the proper disposal of contaminated products and the decontamination of affected food facilities in order to protect the public health.

Appendix III: Summary of Agencies' Roles and Responsibilities to Support the National Response Framework

Federal Supporting Agency	Roles and Responsibilities
Department of Defense (DOD)	<ul style="list-style-type: none">• Alerts the NDMS Federal Coordinating Centers (FCC) (i.e., the Army, the Navy, and the Air Force), and provides specific reporting and regulating instructions to support incident relief efforts.• Alerts the NDMS FCCs to activate NDMS patient reception plans with a phased, regional approach and, when appropriate, with a national approach.• Provides support, at the request of HHS, for the evacuation of patients to locations where hospital care or outpatient services are available.• Evacuates and manages victims and patients from the patient collection point in or near the incident site to patient reception areas, using available DOD transportation resources in coordination with the NDMS Medical Interagency Coordination Group.• Provides available logistical support to public health and medical response operations.• Provides available medical personnel for casualty clearing/staging and other missions, as needed, including aero-medical evacuation and medical treatment.• Mobilizes and deploys available Reserve and National Guard medical units, when authorized and necessary, to provide support.• Coordinates patient reception, tracking, and management to nearby NDMS hospitals, Department of Veterans Affairs hospitals, and DOD military treatment facilities that are available and can provide appropriate care.• Provides available military medical personnel to assist in the protection of public health (such as food, water, wastewater, solid waste disposal, vectors,^a hygiene, and other environmental conditions).• Provides available veterinary military personnel to assist ESF #8 personnel in the medical treatment of animals.• Provides available DOD medical supplies for distribution to mass care centers and medical care locations being operated for incident victims, with reimbursement to DOD.• Provides available emergency medical support to assist state, tribal, or local officials within the disaster area and the surrounding vicinity. Such services may include triage, medical treatment, mental health support, and the use of surviving DOD medical facilities within or near the incident area.• Provides assistance, as available, in managing human remains, including victim identification and mortuary affairs and temporary internment of the dead.

Appendix III: Summary of Agencies' Roles and Responsibilities to Support the National Response Framework

Federal Supporting Agency	Roles and Responsibilities
Department of Homeland Security (DHS) and Federal Emergency Management Agency (FEMA)	<p>DHS:</p> <ul style="list-style-type: none">• Provides communications support in coordination with ESF #2^b Communications.• Maintains situational awareness and the common operating picture via the Homeland Security Information Network.• Assists in providing information and liaison with emergency management officials in NDMS FCC areas.• Identifies and arranges for use of DHS/U.S. Coast Guard aircraft and other assets in providing urgent airlift and other transportation support.• Directs the Nuclear Incident Response Team, when it is activated, and ensures coordination of Nuclear Incident Response Team activities with the ESF primary agency and designated coordinating agency under the Nuclear/Radiological Incident Annex, which is part of the National Response Framework.• Through the Interagency Modeling and Atmospheric Assessment Center,^c provides predictions of hazards associated with atmospheric releases for use in emergency response.• Provides enforcement of international quarantines through DHS/U.S. Coast Guard, Customs and Border Protection, and Immigration and Customs Enforcement. <p>FEMA:</p> <ul style="list-style-type: none">• Provides logistical support for deploying required ESF #8 medical elements and coordinates the use of mobilization centers and staging areas, transportation of resources, use of disaster fuel contracts, emergency meals, potable water, base camp services, supply and equipment resupply, and use of all national contracts and interagency agreements managed by DHS for response operations.• Provides total asset visibility through the use of global positioning system tracking services to enable visibility of ESF #8 resources through mapping capabilities and reports.• Assists in arranging transportation to evacuate patients who are too seriously ill or otherwise incapable of being evacuated in general evacuation conveyances.• Provides tactical communications support through mobile emergency response support, inclusive of all communication types (i.e., deployable satellite and radio frequency /radio communications).

Source: GAO analysis of DHS documentation.

^aVectors are living organisms—such as mosquitoes, ticks, or fleas—that can transmit infectious diseases between humans or from animals to humans.

^bUnder the *National Response Framework*, ESF #2 is a key response core capability for operational communications.

^cThe Interagency Modeling and Atmospheric Assessment Center, led by FEMA, coordinates and disseminates federal atmospheric dispersion modeling and hazard prediction products. These products provide the federal position during actual or potential incidents involving hazardous material releases.

Appendix IV: Comments from the Department of Defense

In addition to providing agency comments, DOD conducted a security review of a draft of this report under report number GAO-17-150SU. DOD determined that no For Official Use Only (FOUO), proprietary, or other sensitive DOD information was found, and that the department had no objection to public release of the report subject to concurrence of the non-DOD agencies mentioned in the report. We subsequently changed the report number to GAO-17-150 to reflect this status.

UNCLASSIFIED



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
2600 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-2600

HOMELAND DEFENSE &
GLOBAL SECURITY

JAN 25 2017

Mr. Joseph Kirschbaum
Director, Defense Capabilities Management
U.S. Government Accountability Office
441 G. Street, NW
Washington, DC 20548

Dear Mr. Kirschbaum:

This is the Department of Defense (DoD) response to the GAO Draft Report, GAO-17-150SU, "DEFENSE CIVIL SUPPORT: DOD, HHS, and DHS Should Use Existing Coordination Mechanisms to Improve Their Pandemic Preparedness," dated November 18, 2016 (GAO Code 100308).

The Department concurs in the report's recommendation. DoD will work with HHS, the primary agency for public health and medical services and the lead for pandemic planning, and DHS to explore opportunities that leverage existing coordination mechanisms in identifying the full spectrum of resources from Federal, State, local, and private sector entities for pandemic preparedness and response.

If you have any questions, please contact the DoD primary action officer, Mr. Philip Newton, at (571) 256-8337 or by email at philip.o.newton2.civ@mail.mil.

Sincerely,

Robert G. Salesses
Deputy Assistant Secretary of Defense
Homeland Defense Integration &
Defense Support of Civil Authorities

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Appendix V: Comments from the Department of Health and Human Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

OFFICE OF THE SECRETARY

Assistant Secretary for Legislation
Washington, DC 20201

DEC 20 2016

In addition to providing agency comments, HHS conducted a sensitivity review of a draft of this report under report number GAO-17-150SU. HHS determined that the draft report does not contain any sensitive information, and the final report is cleared for open publication. We subsequently changed the report number to GAO-17-150 to reflect this status.

Joseph W. Kirschbaum
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Mr. Kirschbaum:

Attached are comments on the U.S. Government Accountability Office's (GAO) report entitled, "Defense Civil Support: DOD, HHS, and DHS Should Use Existing Coordination Mechanisms to Improve Their Pandemic Preparedness" (GAO-17-150SU).

The Department appreciates the opportunity to review this report prior to publication.

Sincerely,

Jim R. Esquea
Assistant Secretary for Legislation

Attachment

**GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN
SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S DRAFT
REPORT ENTITLED: DEFENSE CIVIL SUPPORT: DOD, HHS, AND DHS SHOULD
USE EXISTING COORDINATION MECHANISMS TO IMPROVE THEIR PANDEMIC
PREPAREDNESS (GAO-17-150SU)**

The U.S. Department of Health and Human Services (HHS) appreciates the opportunity from the Government Accountability Office (GAO) to review and comment on this draft report.

Recommendation

As HHS plans to respond to a pandemic, we recommend that the Secretary of Health and Human Services direct the Assistant Secretary for Preparedness and Response (ASPR) to use HHS's existing coordination mechanisms with the Department of Defense (DoD) and the Federal Emergency Management Agency to explore opportunities to improve their preparedness and response to a pandemic if DoD's capabilities are limited or unavailable.

HHS Response

HHS concurs with comments with GAO's recommendation. HHS will ensure that the issue of limited or unavailable support from DoD during a pandemic is included in its analysis and rewrite during its next review of its Pandemic Annex to the All-Hazards plan.

The response to a national pandemic of severe influenza virus will undoubtedly require assets beyond the specific available above and beyond the primary mission concerns of those supportive Departments. HHS's capabilities include maximum coordination with state and local health care coalitions, state and local public health officials, and potentially with commercial pharmaceutical developers and medical product distribution systems. Within HHS, ASPR is the lead agency to coordinate an Emergency Support Function #8 response to a pandemic. DoD provides available support to ASPR through established mechanisms specified within the National Response Framework, the Emergency Management Group function, and the National Disaster Medical System. These are examples of the everyday relationships that HHS has employed to respond to past pandemics, such as 2009 H1N1, and has continued to incorporate into planning for possible future pandemics. The opportunities that other federal agencies (i.e., the Department of Homeland Security, DoD, U.S. Department of Agriculture, etc.) provide to expand beyond this considerable capability is a strength of the National Response Framework.

GAO should better define "limited" in reference to DoD's roles and responsibilities and capabilities. By better defining the term, DoD will be better able to articulate what resources may or may not be available to aid response efforts and to subsequently better inform next iterations of planning documents. In the *Biological Incident Annex*, which the National Security Council is currently circulating through interagency clearance, DoD provides the following list of "limited" roles and responsibilities:

- DoD has significant resources that may be accessed to respond to domestic emergencies and, in the case of a biological incident, provides a spectrum of capabilities that protect not just DoD, but the general public as well.
- To ensure advanced warning of threats, the Defense Intelligence Agency/National Center for Medical Intelligence (NCMI) provides intelligence assessments of foreign health threats, including pandemic warning, to prevent strategic surprise across the broad threat spectrum.

**GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN
SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S DRAFT
REPORT ENTITLED: DEFENSE CIVIL SUPPORT: DOD, HHS, AND DHS SHOULD
USE EXISTING COORDINATION MECHANISMS TO IMPROVE THEIR PANDEMIC
PREPAREDNESS (GAO-17-150SU)**

natural, accidental, or intentional. This forensic capability allows DoD to provide expert advice, technical assistance and, if necessary, operational support to the attribution assessment process.

Appendix VI: Comments from the Department of Homeland Security

In addition to providing agency comments, DHS conducted a sensitivity review of a draft of this report under report number GAO-17-150SU. DHS determined that the draft report does not contain any sensitive information, and the final report is cleared for open publication. We subsequently changed the report number to GAO-17-150 to reflect this status.

U.S. Department of Homeland Security
Washington, DC 20528



December 21, 2016

Joseph W. Kirschbaum
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Re: Management's Response to Draft Report GAO-17-150SU, "DEFENSE CIVIL SUPPORT: DOD, HHS and DHS Should Use Existing Coordination Mechanisms to Improve Their Pandemic Preparedness"

Dear Mr. Kirschbaum:

Thank you for the opportunity to review and comment on this draft report. The U.S. Department of Homeland Security (DHS) appreciates the U.S. Government Accountability Office's (GAO) work in planning and conducting its review and issuing this report.

The Department is pleased to note GAO's positive recognition of the Federal Emergency Management Agency's (FEMA) efforts to plan, coordinate and train for national emergencies alongside the Department of Health and Human Services (HHS) and the Department of Defense (DOD). DHS, and in particular FEMA, plays a vital role in carrying out tasks and responsibilities outlined in the "National Response Framework," the doctrine for how the United States builds, sustains, and delivers the core capabilities responding to all types of disasters and emergencies, and actively pursuing improved preparedness through formal interactions with interagency partners. In particular, FEMA stands ready to support the mission objectives outlined in the Biological Incident Annex to the "Federal Interagency Operational Plan for Response and Recovery" and remains committed to close collaboration and integration with all partner agencies who have a stake in the protecting the Nation against a pandemic incident.

The draft report contained one recommendation for DHS with which the Department concurs. Attached find our detailed response to the recommendation.

**Appendix VI: Comments from the Department
of Homeland Security**

Again, we thank you for the opportunity to review and comment to this draft report. Technical comments were previously provided under separate cover. Please feel free to contact me if you have any questions. We look forward to working with you in the future.

Sincerely,



JIM H. CRUMPACKER, CIA, CFE
Director
Departmental GAO-OIG Liaison Office

Attachment

2

**Attachment: DHS Management Response to Recommendations
Contained in GAO 17-150SU**

GAO recommended that the Secretary of Homeland Security direct the FEMA Administrator to:

Recommendation: Use FEMA's existing coordination mechanisms with DOD and HHS to explore opportunities to improve their preparedness and response to a pandemic if DOD's capabilities are limited or unavailable.

Response: Concur. FEMA agrees that strengthening established relationships with its DOD and HHS partners, including conducting planning events and live exercises, are cornerstones to increased preparedness for all interagency partners tasked with emergency response. FEMA's Office of Response and Recovery planners will continue to explore opportunities to improve and update pandemic preparedness plans by incorporating key planning assumptions, restraints, constraints, post-exercise lessons learned, and other relevant factors related to scenarios when DOD support is limited or otherwise unavailable. Estimated Completion Date: March 31, 2017.

Appendix VII: GAO Contact and Staff Acknowledgments

GAO Contact

Joseph Kirschbaum, (202) 512-9971 or KirschbaumJ@gao.gov

Staff Acknowledgments

In addition to the contacts named above, GAO staff who made key contributions on this report include Elizabeth Curda, Acting Director; Mark A. Pross, Assistant Director; Tracy Barnes, Steve Boyles; Margaret Holihan; Joanne Landesman; Latrealle Lee; Amie Lesser; and Amber Sinclair.

Related GAO Products

Emerging Infectious Diseases: Preliminary Observations on the Zika Virus Outbreak, [GAO-16-470T](#). Washington, D.C.: March 2, 2016.

Influenza Pandemic: Lessons from the H1N1 Pandemic Should Be Incorporated into Future Planning, [GAO-11-632](#). Washington, D.C.: June 27, 2011.

Influenza Pandemic: Monitoring and Assessing the Status of the National Pandemic Implementation Plan Needs Improvement, [GAO-10-73](#). Washington, D.C.: November 24, 2009.

Influenza Pandemic: Sustaining Focus on the Nation's Planning and Preparedness Efforts, [GAO-09-334](#). Washington, D.C.: February 26, 2009.

Influenza Pandemic: Further Efforts Are Needed to Ensure Clearer Federal Leadership Roles and an Effective National Strategy, [GAO-07-781](#). Washington, D.C.: August 14, 2007.

Influenza Pandemic: DOD Combatant Commands' Preparedness Efforts Could Benefit from More Clearly Defined Roles, Resources, and Risk Mitigation, [GAO-07-696](#). Washington, D.C.: June 20, 2007.

Influenza Pandemic: DOD Has Taken Important Actions to Prepare, but Accountability, Funding, and Communications Needed to be Clearer and Focused Departmentwide, [GAO-06-1042](#). Washington, D.C.: September 21, 2006.

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